



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

February 8, 2016

Gary Asbridge, District Ranger
3160 NE 3rd Street
Prineville, OR 97754

Dear Mr. Asbridge:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the proposed Gap Landscape Restoration Project on the Paulina Ranger District within the Ochoco National Forest in Crook County, Oregon (EPA Project Number 15-0063-AFS). Our review was conducted in accordance with EPA responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act.

The DEIS analyzes the range of effects of four alternatives: the no action alternative and three action alternatives. The action alternatives are designed to treat fuels and vegetation through the use of harvest, noncommercial thinning, juniper removal, hardwood restoration, riparian restoration and prescribed burning. Project components under Alternative 2 (the preferred alternative) include commercial and noncommercial thinning on 16,064 acres, including 1,041 acres of commercial thinning and 1,249 acres of pre-commercial thinning within riparian habitat conservation areas (RHCAs). Alternative 3 does not include commercial thinning in RHCAs and includes additional consideration for wildlife habitat; and Alternative 4 allows for the removal of select trees over 21 inches in diameter at breast height (dbh).

The EPA is supportive of the overarching goals and objectives of the proposed project, and we find the DEIS to be robust and well organized. We also appreciate the Forest's responsiveness to issues raised during the scoping process. In particular, we appreciate the incorporation of the "Criteria to Guide Decision-making on the Removal/Retention of Grand fir and Douglas-fir" provided by the Ochoco Forest Restoration Collaborative, and the effort taken to incorporate principles of ecological forestry into the proposal. Overall, we find the treatments proposed under Alternative 2 to align well with the broad body of science emerging about dry and moist mixed conifer forests¹. We also support the in-stream restoration, culvert replacement, riparian fencing and road decommissioning work that has been incorporated into all of the action alternatives. These activities will address key sediment sources; accelerate the recovery of hydrologic function of aquatic ecosystems in the planning area; and help to restore water tables.

With regard to proposed activity within the RHCAs, we are pleased to note that the preferred alternative focuses active management on improving higher gradient RHCAs. These riparian zones are more likely to exhibit the fire regime of the adjacent upslope environment and benefit from silvicultural treatment to restore the natural fire regime. We also note, however, the challenges associated with restoring complex, dynamic systems, and with understanding our ability to affect those systems. Resilience can be difficult to measure – due in part to data availability and in part to the tools at our disposal. Given these

¹ http://www.fs.fed.us/pnw/publications/MMC_Synthesis_24Feb14.pdf

restraints, there is a need to employ a strong monitoring and adaptive management approach. The scope and scale of the Gap Restoration Project present an excellent opportunity to understand how treatments, such as those proposed in the RHCAs, may affect ecological interactions at the landscape scale. We recommend that the FEIS and ROD highlight the need to employ multi-party monitoring, and to track the results of management efforts and follow disturbances and recovery efforts over a long term within the RHCAs. Having this information will give managers the ability to inform subsequent management decisions with what was learned from previous management decisions, and thus make appropriate adjustments.

Our review of the DEIS identified a limited set of issues that we recommend be addressed in the final EIS. These are related to ensuring clarity and consistency in the description of riparian treatments, and characterization of climate change effects. Those brief comments are attached.

Based on our review, we are rating the DEIS as LO (Lack of Objections). We appreciate the opportunity to review and comment on the DEIS, and we look forward to furthering our understanding of this project. If you have any questions about our review, please contact me at (206) 553-1601, or by electronic mail at littleton.christine@epa.gov, or you may contact Teresa Kubo of my staff at 503-326-2859 or by electronic mail at kubo.teresa@epa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Christine B. Littleton". The signature is fluid and cursive, with the first name being the most prominent.

Christine B. Littleton, Manager
Environmental Review and Sediment Management Unit

Enclosure:

1. EPA Region 10 Detailed Comments - Gap Landscape Restoration Project DEIS

**EPA Region 10 Detailed Comments
Gap Landscape Restoration Project DEIS
February 8, 2016**

Riparian Treatment

In Alternatives 2 and 4, the DEIS proposes activities within the Riparian Habitat Conservation Area (RHCA) in order to move those areas toward attainment of Riparian Management Objectives (RMOs). We appreciate the careful unit-by-unit analysis included in the DEIS related to shade and large wood. Overall, we support the proposed treatment objectives and prescriptions in both alternatives 2 and 4. We make the following recommendations for the final EIS in order to ensure that there is internal consistency within the document and clarity for reviewers:

- Tables 15 - 17 are key to understanding proposed treatments within RHCAs. We recommend that the FEIS provide greater definition around the terminology used in these tables. This would include defining acronyms that are not defined elsewhere (i.e. RX2, RX3, etc.) and clarifying what is meant by "unit boundary" (i.e. harvest unit boundary).
- We note some apparent inconsistencies within the document related to the removal of trees greater than or equal to 21 inches within the RHCA. Table 50 indicates that there would be 161 acres of silvicultural treatment within RHCAs where trees 21 inches and over could be removed. Table 151 (p. 379) similarly indicates that there are 0.73 miles of stream where trees 21 inches and over could be commercially removed within the primary shade zone (PSZ). These tables do not seem to be consistent with the text on page 334 where it is stated, "No trees >21" would be harvested within RHCA in Alternative 4" or text on page 380, where it is stated, "...0.73 miles of stream has commercial harvest of trees >21" dbh in Alternative 4, however only outside of the RHCA." It is not clear now the 0.73 stream miles proposed for treatment could be within the primary shade zone but outside of the RHCA. As the document is finalized, we recommend that these apparent inconsistencies be addressed.

Finally, we note that the primary shade zone for trees greater than 100 to 140 feet is defined at 70 feet (page 378). This is based on an assumption that slopes will not exceed 30-35%. We recognize that the project design features only allow for the removal of trees that do not provide primary shade or provide bank stability. Nevertheless, in order to increase reviewer certainty, we recommend the inclusion of primary shade distance for slopes over 35%.

Climate Change

The DEIS states on page 403 that the greenhouse gas emissions associated with harvest and burning under the Gap Project would make an "infinitesimal contribution" to overall global emissions, making their contribution to greenhouse gases and climate change negligible. We recommend that as the EIS is finalized, the Forest Service move away from characterizing project-related emissions as "infinitesimal." Changes in climate are not attributable to any single action, but are exacerbated by a series of smaller decisions. Such statements are commentary on the nature of the climate change challenge and should not be considered as a basis for deciding whether to consider climate impacts under NEPA.

As the FEIS is finalized, we encourage the Forest Service to include to a comparison of net GHG emissions and carbon stock changes that would occur with and without implementation of the Gap Project. This analysis can incorporate by reference earlier programmatic studies or information such as management plans, inventories, assessments, and research that considers potential changes in carbon stocks, as well as any relevant programmatic NEPA reviews.